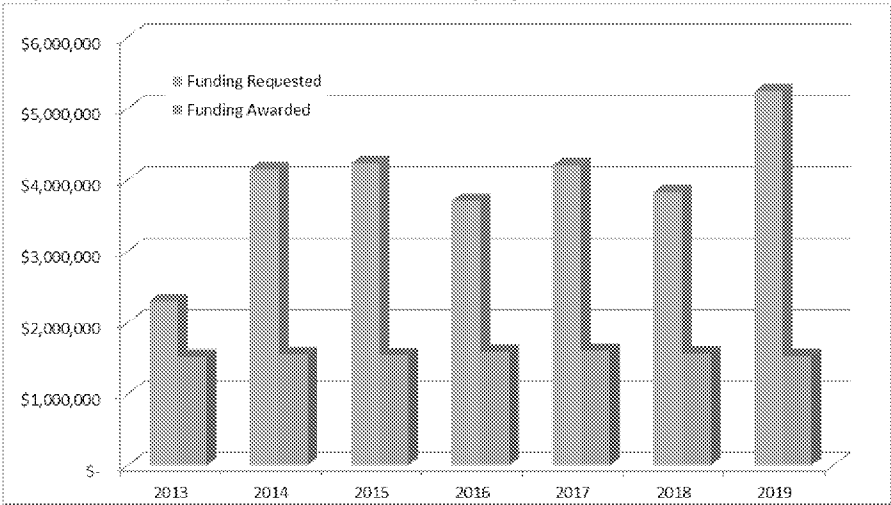


Project Title	Political Subdivision	Clean Water Act Program	Amount Requested Total: \$19.54 M	Granting Vehicle(s)	Project Need	References/ Attachments
Utah Lake Numeric Nutrient Criteria Development	Utah County	Standards, Assessment, and TMDL	\$1,615,000	106 104(b)3	<p>Utah Lake is one of the largest natural freshwater lakes in the western United States. The lake is considered hypereutrophic and experiences large seasonal harmful algal blooms, elevated pH, and cyanotoxin production. The lake is the receiving body for 7 wastewater treatment plants, industrial discharges, stormwater discharges, and nonpoint source runoff. Rapid growth and urban expansion within the watershed may be exacerbating these hypereutrophic conditions.</p> <p>The goal of the Utah Lake Water Quality Study (ULWQS) is to develop nitrogen and phosphorus numeric criteria that are protective of the lake’s designated beneficial uses and develop a plan to achieve the criteria through regulatory and incentive based approaches across the watershed. The study is being led by a stakeholder based Steering Committee with research guided by a 10 member Science Panel.</p> <p>This project is funded with a grant of \$1,000,000 from the Utah Water Quality Board Hardship Grant fund and a \$500,000 appropriation from the Utah State Legislature. The Division is mid-way through the project and projects a funding shortfall of \$1.8 million.</p> <p>Research contracts: \$700,000 Science Panel costs: \$180,000 Model development (lake and watershed): 420,000 Facilitation (years 3 and 4): \$140,000 Numeric Nutrient Criteria Development and Package: \$175,000</p>	<p>[ HYPERLINK "https://deq.utah.gov /water-quality/utah-lake-water-quality-study" ]</p> <p>Would need more information on research contracts, science panel costs and facilitation. May help to link to the 3 phases of the study.</p> <p>Highlighted projects appear 106 eligible. Would need more information on others.</p>
Septic Density Studies	Wasatch County Utah County Bear Lake Garfield County Washington County	Watershed protection, Nonpoint source, On-site wastewater permitting	\$720,000	319, 106, 104(b)(3)	There is a need to evaluate appropriate septic densities in sensitive source protection areas or lake shorelines that are affected by development and threatened by increased nitrogen or <i>E. coli</i> loading. Increasingly DWQ is aware of water quality impacts to Utah’s ground water and surface waters due to proliferation of septic systems in unsewered developments. DWQ is seeking site-specific evaluations of watersheds with high density of septic systems to better understand hydrological and geological factors associated with pollutant transport and flows in impacted areas to	GW and SW assessments are 106 eligible. Would need to discuss subawards and match requirement with Stephanie Rich

					<p>support decisions implemented by our partners in local health departments around the state. These studies will guide appropriate permitting at the local level.</p> <p>Budget request is to support up to 60% of the cost of septic density studies through a competitive grant process. Match will come from local health departments and/or state of Utah. A recent bid for a county wide septic density studies was \$400,000.</p>	
PFAS reconnaissance monitoring implementation	Statewide	Monitoring, Standards	\$850,000	106, 104(b)(3)	<p>Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that have been manufactured and used in a variety of industries since the 1940s. These chemicals are very persistent in the environment and in the human body and there is evidence that exposure to PFAS can lead to adverse human health effects (EPA). More than 6,000 PFAS compounds are known to exist, although not all are in current use or production.</p> <p>Utah has very little information available to characterize the occurrence or use of PFAS in Utah. Recently, Utah DEQ prepared a PFAS reconnaissance monitoring plan that includes the following phases: <i>Phase 1: Plan development (nearly complete)</i> <i>Phase 2: Public drinking water source sampling</i> <i>Phase 3: Surface water sampling in areas with industrial and municipal discharges</i> <i>Phase 4: Monitoring fish tissue, bird tissue, and biosolids in areas known to have PFAS contamination</i> <i>Phase 5: Risk analysis and characterization for other potential exposure pathways</i></p> <p>Budget request represents sampling and analytical costs for Phases 2 – 4.</p>	<p>Draft PFAS reconnaissance monitoring plan (attached; confidential draft)</p> <p>Question about Phase 2 wording</p> <p>Biosolid sampling would not be 106 eligible. Would need to look into bird sampling.</p>
Agricultural Water Quality Improvement	Statewide	Nonpoint source reduction	\$3,420,000	319	<p>The goal of this program is to incentivize agricultural producers to adopt practices that improve water quality and add value to their operations.</p> <p>Nearly half of the waters in Utah are impaired due to poor water quality, including impairments affecting 34 drinking water sources, 15 blue-ribbon fisheries, two national parks, and 16 state parks. The majority of impairments are in areas that do not have regulated discharges which means that restoration and water quality improvements have to be addressed through incentive based voluntary programs. Many of the impairments in the state are dominated by agricultural uses including</p>	<p>FY20 State building block request (attached)</p>

					<p>unpermitted Animal Feeding Operations (AFOs) and Concentrated Animal Feeding Operations (CAFOs).</p> <p>One of the most effective approaches to reducing unregulated runoff from agricultural operations is through the implementation of nutrient management plans. Historically, half of Utah’s producers were actively implementing nutrient management plans covering hundreds of thousands of acres across the state. However, due to shifts in federal priorities from the NRCS and reduced funding from EPA, this effort has shrunk to include only a handful of NMPs covering less than 1% of the state’s agricultural land. We aim to increase this to 15% of the state’s agricultural land in active production (150,000 acres).This project will help solve the following problems in Utah:</p> <ul style="list-style-type: none"><li>• Harmful algal blooms, especially in rural Utah, such as Scofield Reservoir, Yuba Lake, Mantua Reservoir, Otter Creek Reservoir, and Matt Warner Reservoir</li><li>• Threats to drinking water sources in Utah’s upper watersheds including Deer Creek Reservoir, Pineview Reservoir, Rockport Reservoir, and Echo Reservoir</li><li>• Bacterial impairments in important recreational areas of the state including Zion National Park, Capitol Reef National Park, and Provo River</li><li>• Water quality impairments and habitat for important fisheries including the Weber River, Provo River, Strawberry River, and Sevier River</li></ul> <p>Budget request is for 60% of incentive payments over 3 years with 40% match offered by the State of Utah. Target to have 150,000 acres operated under Comprehensive Nutrient Management Plans through new incentive payments (\$12/acre/year).</p>	
Nonpoint Source Project Implementation	Statewide	Nonpoint source reduction	\$10,000,000	319	<p>Although demonstrated to be effective at reducing pollution, resources allocated to incentive based voluntary efforts are insufficient to make meaningful progress on agricultural pollution to waters of the state. DWQ manages a grant program to provide financial assistance to agricultural producers to implement improvement projects intended to reduce surface water pollution. Coupled with a watershed planning process to focus and prioritize restoration efforts, the grant program uses a rotating basin approach to concentrate funding and outreach efforts in watersheds where water quality issues can be more fully addressed and demonstrable</p>	<p>FY20 State building block request (attached) FY18 and FY19 319 project</p>

					<p>improvement can be measured. This allows us to triage each basin for the projects that will have the maximum impact on improving water quality in each area. While effective at the local watershed level, the current level of funding and staff support limits the number and scope of these implementation efforts and available grant dollars are continually outpaced by the demand from applicants seeking to implement water quality improvement projects.</p>  <table><caption>Funding Requested vs. Funding Awarded (2013-2019)</caption><tr><th>Year</th><th>Funding Requested (\$)</th><th>Funding Awarded (\$)</th></tr><tr><td>2013</td><td>2,500,000</td><td>1,500,000</td></tr><tr><td>2014</td><td>4,300,000</td><td>1,500,000</td></tr><tr><td>2015</td><td>4,300,000</td><td>1,500,000</td></tr><tr><td>2016</td><td>3,800,000</td><td>1,500,000</td></tr><tr><td>2017</td><td>4,300,000</td><td>1,500,000</td></tr><tr><td>2018</td><td>3,900,000</td><td>1,500,000</td></tr><tr><td>2019</td><td>5,400,000</td><td>1,500,000</td></tr></table> <p>Budget request is for \$10,000,000 to meet the unsatisfied demand for nonpoint source projects around the state for 5 years (approximately \$2 million annual programmatic deficit).</p>	Year	Funding Requested (\$)	Funding Awarded (\$)	2013	2,500,000	1,500,000	2014	4,300,000	1,500,000	2015	4,300,000	1,500,000	2016	3,800,000	1,500,000	2017	4,300,000	1,500,000	2018	3,900,000	1,500,000	2019	5,400,000	1,500,000	
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Quagga Mussel	Lake Powell, San Juan County, UT	TBD	\$1,935,000	EPA consultation needed	<p>Lake Powell has been designated as infested with invasive quagga mussels since 2013. The Utah Division of Wildlife Resources (UDWR), the National Park Service (NPS), and Arizona Game &amp; Fish (AZGF) have worked cooperatively at Glen Canyon National Recreation Area to implement the largest invasive mussel containment program in the nation, including exit inspections of all departing watercraft during daylight hours, to ensure no attached mussels nor contaminated water leave the area. Hot water decontaminations are performed on select watercraft that pose a higher risk of transporting and introducing quagga mussels into other waterbodies. With approximately 400,000 boat launches occurring there annually and a year-round boating season, Lake Powell represents a significant challenge. Multiple layers of</p>	<p>[ HYPERLINK "https://stateparks.utah.gov/activities/boating/quagga-mussels-ais/" ]</p> <p>Not Section 106</p>																								

					<p>protection have been established through staffing on launch ramps and operation of highway inspection stations. More stations are needed to address the recent increase in the number of boats retrieved with mussels onboard and to ensure that no other waterbodies become infested with quagga mussels.</p> <p>Budget request is for 3 stations operating for 3 years (\$215,000/station/year).</p>	
Water Reuse		Permitting	\$1,000,000	104(b)(3) 106	<p>USEPA has identified promotion of water reuse as a top priority for the administration as discussed in the National Water Reuse Action Plan. In Utah, concerns about the impacts of water reuse on instream flows and levels in the Great Salt Lake have hindered adoption of these technologies. DWQ seeks funding for the evaluation of the feasibility and cost-benefits of wastewater reuse including economics, water rights, and potential impacts on in-stream flows especially along the urban Wasatch Front.</p> <p>Budget request is for a consultant to conduct a study in partnership with DEQ, publically owned treatment works, and the Department of Natural Resources.</p>	<p>Majority does not appear Section 106 eligible – would need more information on in-stream flow impacts – is that modeling?</p>